

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Serial No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name		
PO038315	MES002-VC	1	1	COD	MT-41L40-R1.500	AISI 41L40 Leaded Steel Round Bar 1.500" Dia. material: AISI 41L40 STEEL ROUND BAR PER AISI 41L40				12	11/17/2017	12		S011027	Stock	11/17/2017	\$ 39.00 / ft	0	0	\$468.00	Metaux Solutions		
		2			M303B0.500" x 4.000"	AISI 303 SS Bar 0.500" x 4.000" : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft				3		3		S011028	Stock	11/17/2017	\$ 131.67 / ft	0	0	\$395.00	Metaux Solutions		
Total:										15		15										\$677.20	

Shipping Order

15/11/2017

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel.: 450 641-3330

Order : 130371
Reference : 38315
Bid : 24929
Ship : PICK UP / PICK UP

Customer: 6323336

Ship To

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
MR11241L	41L40 ANN ROU 1.500 DIA. 1 X 12 ***** ht:182713	12	12	Ø
SP124363	303 PLT 500 X 4 X 36 1 PC ***** ht:266250	1	1	Ø

ship journey collect

SOL 11-17

Shipping : _____
Package No : _____

Ref. : _____

Merchandise Received: _____

METALUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 Tel.: 450 641-3330

Shipping Order 15/11/2017

Order : 130371
Reference : 38315
Bid : 24929
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DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

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sp124363	303 PLT .500 X 4 X 36 1 PC ***** ht;266250	1	1	Ø

ship journey collect

Shipping :
Package No :
Merchandise Received:

Ref. :
Nov 16-17

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 01 of 02

Certification Date
14-NOV-2017

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
T372678

43598-J
PART NUMBER/NUMÉRO DE PIÈCE
506116

SOLD TO: METAUX SOLUTIONS INC. SHIP TO: METAUX SOLUTIONS (RIVE-SUD)
VENDU À: 2625 BOUL JACQUES CARTIER EST EXPÉDIÉ À: 2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7 LONGUEUIL QC J4N 1

Description: 41L40/42 CF ANN BAR ASTM A331
1-1/2 RD X 12' R/L
HEAT: 182713 ITEM: 506116

Line Total: 73 LB

Specifications:

ASTM A331 *
ASTM A304 11
MIC 2016 1 12
ASTM A255 10
ASTM E112 13
ASTM A388/A388M 15
AMS 2750

*WITHDRAWN SPEC
ASTM A322 13
MIC 2016 ADD 71 10
ASTM E45 13
ASTM E381 06
AMS MIL H 6875
API 6A ANNEXE M

ASTM A108 13
ASTM A29/A29M E1 12
EN 10204 3.1 04
ASTM E10 15
ASTM E709 14
AMS MIL STD 1684

CHEMICAL ANALYSIS

C	MN	SI	P	S	CR	NI	MO
0.42	0.96	0.26	0.019	0.026	1.02	0.15	0.17
V	CU	AL	SN	PB	CA	H	
0.006	0.21	0.028	0.012	0.15/0.35	0.0004	0.0001	

RCPT: R174132

COUNTRY OF ORIGIN : SPAIN

MECHANICAL PROPERTIES

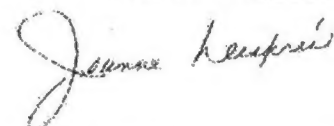
DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED IN AREA	HARDNESS BHN 198
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The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
14-NOV-2017

43598-J
PART NUMBER/NUMÉRO DE PIÈCE
506116

Invoice Number
T372678

SOLD TO: METAUX SOLUTIONS INC.	SHIP TO: METAUX SOLUTIONS (RIVE-SUD)
VENDU À: 2625 BOUL JACQUES CARTIER EST	EXPÉDIÉ À: 2625 BOUL JACQUES CARTIER EST
LONGUEUIL QC J4N 1L7	LONGUEUIL QC J4N 1

Description: 41L40/42 CF ANN BAR ASTM A331
1-1/2 RD X 12' R/L

HEAT: 182713

ITEM: 506116

Line Total: 73 LB

END-QUENCH HARDENABILITY (JOMINY - RC) IN

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
57	57	56	56	56	55	55	54	54	53	52	50	49	48	47
16	18	20	22	24	26	28	30	32						
46	45	44	43	42	41	41	40	40						

GRAIN SIZE : 7 -

CLEANLINESS

	A		B		C		D	
	THIN MAX	THICK MAX	THIN MAX	THICK MAX	THIN MAX	THICK MAX	THIN MAX	THICK MAX
e45	2.0	0.5	2.0	0.5	0.0	0.0	0.5	0.0

VACUUM DEGASSED MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
EDDY CURRENT: YES
ULTRASONIC: YES
MACRO: OK
MICRO1: OK

COMMENTS

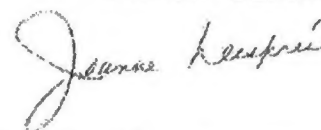
red. ratio 27,2
free from radioactive contamination

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

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JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

Acciaierie Valbruna S.p.A.



CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2004) , 3.1

36100 VICENZA (Italy) - Viale della scienza, 25 z.1.
 Telefono 0444.968211 - Fax 0444.963355
 Stab.: 39109 BOLZANO (Italia) - Via A. Volta, 4/37
 Telefono 0471.924111 - Fax 0471.924497

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Avviso di Spedizione:
 Logistica/Spedition: D-V15019574

Ordine nr. 43992
 Serie:
 Versione:
 Contratto:

Tipo di Elaborazione: E-A00
 Beschreibend: Schmelzerguss, geschmiedet, oder extrudiert

Certificato nr: MEST722816/2015/

Prüfungsinstitut:
 Conferma ordine nr: E115001529

Versione Ordine:

Marchio di Fabbrica:

Zeichen des Lieferanten:
 Trade mark:
 Style de l'usine productrice:

Funzione del Collaudatore:
 Stempel des Prüfabnehmers:
 Inspection stamp/signature of the Inspector

Produttore: ACCIAIERIE VALBRUNA S.P.A.
 Hersteller/Produktionsproduzent:

Stato di fornitura: Hot rolled Descaled Annealed Hot rolled
 Lieferzustand/Delivery state:

Specifiche:
 Abnahmespezifikation/Requisitenliste/Zugversuch:

VSI 0303 A
 AMS 5640 U TYPE I A
 ASTM A320 2011A B9F CLASS1
 MIL-S-882 B/ 303
 SECTION II PTA 2013 EDITION

AISI 303
 ASME SA320 2013 B9F CLASS1 (C)
 ASTM A370 2014
 QQ-S-754 B/2 303 A

AMS 5640 U S30300 A
 ASTM A314 2008 S30300
 ASTM A562 2012 S30300 A

Qualità: T-303
 Marke/Qualitätsbezeichnung:

Marca:
 Handelsbezeichnung:
 Standard: 20

AU186Z/P

Tolleranza: ASTM A484-14a
 Toleranz/Maßabweichung:

Punzonatura: 303
 Kennzeichnung/Markung/Markierung:

Pos. nr. Pos. nr. 1. a. 2. a. 3. a.	Oggetto Description Detail description	Dimensioni - in Abmessungen Dimensions Dimensions	Lunghezza - in Länge Length Length	Colata Guss Cast	Pezzi Stückzahl Pieces Pieces	Peso - LB Gewicht Weight Poids	Lotto nr. Los Lot Lote
0080	Flat	4,0000 x 0,5000	144/ 152	266250		3.252	504403260

TEST ALLO STATO DI FORNITURA										
Test on delivery condition Prüfung auf lieferbarem Produkt Test à l'état de fourniture Prueba sobre el material así como entregado										
Dati generali del materiale Allgemeine Daten des Materials Données générales du matériel Datos generales del material										
TEST	Proveite/Probes Zugversuch Tensile Test Zugversuch Tensile Test Zugversuch Tensile Test	°F	Prova Saggio Prüfung Prüfung Prüfung Prüfung	Snervamento Biegeversuch Biegeversuch Biegeversuch Biegeversuch Biegeversuch	Snervamento Biegeversuch Biegeversuch Biegeversuch Biegeversuch Biegeversuch	Resistenza Zugversuch Zugversuch Zugversuch Zugversuch Zugversuch	Allungamento Zugversuch Zugversuch Zugversuch Zugversuch Zugversuch	Stirazione Zugversuch Zugversuch Zugversuch Zugversuch Zugversuch	Resistenza Zugversuch Zugversuch Zugversuch Zugversuch Zugversuch	Durezza Härte Hardness Härte
				Rp 0,2%		Rm	E 4d	RA		HB
Valori richiesti Anforderungen Requirements		min max		30	-	75	35	50	-	140 241
A	12,5	68 L	38			81	62	71		163

TEST ALLO STATO DI FORNITURA Test on delivery condition Prüfung auf lieferbarem Produkt Test à l'état de fourniture Prueba sobre el material así como entregado				
TEST	min	max		
A Grain size for ASTM E112				6

Mechanical properties according to ASTM A370.

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Análisis químico

Pos. nr. Pos. nr. 1. a. 2. a. 3. a.	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %
266250	0,035	0,25	1,73	17,13	0,24	0,53	6,19	0,109	0,031	0,32	0,004

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1040°F for 1 h/over.

Micro and macro etch test: OK

Reduction ratio = 25,1 : 1

Material is DFARS Compliant

Vicenza, 14/07/15
 003912
 (Mod. MCEV)

Reclamatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usine

M. Rizzotto

Pagina - 1 di 2

Acciaierie Valbruna S.p.A.



CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2004), 3.1

36100 VICENZA (Italy) - Viale della scienza, 25 z.l.
Telefono 0444 988211 - Fax 0444 983939
Stab - 36100 BOLLANO (Italy) - Via A. Volta, 4/37
Telefono 0471.924111 - Fax 0471.924497

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
Hersteller/Hersteller

Stato di fornitura: **Hot rolled Descaled Annealed Hot rolled**
Lieferzustand

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind in Anlage erfüllt
The order has been fulfilled in accordance with the requirements
Les conditions de livraison ont été remplies

Controllo antiriscossiglianza: OK
Verschleißprüfung: geprüft und befriedigend
Antirust testing performed: OK
Corrosion testing performed: OK

Controllo visivo e dimensionale: soddisfatto in estensione
Beidseitige optische und dimensionale Prüfung
Visual inspection and dimensional check satisfactory
Controllo visivo e dimensionale: satisfaisant

Milled and manufactured in Italy

No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

The Quality Management System is Certified acc. Pressure Equipment Directive '97/23/EC' Annex 1, s. 4.3 by TÜV and LLOYD'S

Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.

Maximal and/or Valpine grades/products are manufactured with ladle techniques in control composition, distribution, size and shape of non-metallic inclusions for improved machinability.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Avviso di Spedizione:

Letzteinsendung: Montag 10.01.2015 D-VI15019974

Ordine nr: 43992

Bestellnr:
Vorderseite:
Zusatz:

Tipo di Elaborazione: E+AOD

Erstellungstechnik: Materialprüfung: Materialprüfung

Certificato nr: MEST722816/2015/

Produkt/Produkt

Conferma ordine nr: EI15001529

Vorbestätigung

Marchio di Fabbrica:

Zusatz: 10.01.2015
Trennung
Nicht in Farbe produzieren

Funzione del Collaudatore:

Geprüft: 10.01.2015
Inspektion: 10.01.2015



Vicenza, 14/07/15
VCC002

Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usage

M. Rizzotto

Pagina - 2 di 2

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-41L40-R1.500
 DATE: DEC 05 2017

PO / BATCH NO.: 038315/5011027

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.50
 THICKNESS RECEIVED: 1.50
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	<u>AIS, 41L40</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	<u>Heat # 182713</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>[Signature]</u>		SIGNED OFF BY: _____	
DATE: <u>DEC 05 2017</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

8 7 6 5 4 3 2 1

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.09.20	SAC	WM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 41L40 STEEL ROUND BAR
SPECIFICATION: AISI 41L40
PART NUMBER: MT-41L40-R (D.DDD)
WHERE "D.DDD" = DIAMETER IN INCHES
EG, 5/8" ROUND BAR = MT-41L40-R0.625

DART AEROSPACE Newmarket, Ontario, Canada	
TITLE AISI 41L40 LEADED STEEL ROUND BAR	
PROJ NO.	REV
MT-41L40-R	A
DESIGN BY: SAC 20/09/2017	XXX 2 283 FRACTIONS & 1/8
DRAWN BY: SAC 09/20/2017	XXX 2 41 ANGLES & 3/4
CHECKED: VM 09/21/2017	1. DIMENSIONS ARE IN INCHES
MFG. APPR: LDP 09/21/2017	2. INTERPRET DIM AND TOL PER
APPROVED: LWM 10/05/2017	3. ASME Y14.5M-2009
DATE: 20/09/2017	4. UNITS APPLY
SCALE: NTS	WEIGHT: N/A
SHEET 1 OF 1	
COPYRIGHT © 2017 BY DART AEROSPACE LTD	
THIS DRAWING IS A PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038315

Supplier: MES002-VC
Metaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

PO No: PO038315

PO Date: 11/9/17

Due Date: 11/17/17

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

NOV 09 2017

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: COD

Freight Terms:

Special Comments: QUOTE # 24929

Items

Line Item	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	MT-41L40-R1.500	-	AISI 41L40 Leaded Steel Round Bar 1.500" Dia. material: AISI 41L40 STEEL ROUND BAR PER AISI 41L40		Firmed	11/17/17	12 ft	0 ft	12 ft	\$39.00/ft	\$468.00
2	M303B0.500X4.000	-	AISI 303 SS Bar 0.500" x 4.000" : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft		Firmed	11/17/17	3 ft	0 ft	3 ft	\$131.6666/ft	\$395.00

Grand Total: \$863.00

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.